

金鯉牌硅酸鹽水泥品質指標

GOLD CARP BRAND PORTLAND CEMENT

< BS12:1996 52.5N >

| I.物理性質 Physical Properties | | |
|---|--|---|
| 澳門水泥標準要求 | Macau Cement Standard | 典型數值 TYPICAL RESULTS |
| A.抗壓強度 (砂漿試塊) 二天強度不低於 20N/mm ² 七天強度無要求 廿八天強度不低於 52.5N/mm ² , 及不高於 72.5N/mm ² | Compressive Strength (Mortar prism) At 2 days not less than 20N/mm ² At 7 days not specified At 28 days not less than 52.5N/mm ² and not higher than 72.5N/mm ² | 22.3N/mm ² 42.0N/mm ² 60.3N/mm ² |
| B.凝結時間 初凝:不低於 60 分鐘 終凝:無要求 | Setting Time Initial setting time not less than 60 minutes. Final setting : not specified | 150 min 210 min |
| C.安定性: 膨脹不大於 10mm | Soundness :Expansion not more than 10mm by “Le Chatelier” Test | 1.0 mm |
| D. 細度(比表面積: 無要求) | Fineness (Specific surface: not specified) | 315 m ² /kg |
| E.標準稠度: (無要求) | Standard Consistence (not specified) | 28.5% |
| F. 比重: (無要求) | Specific Gravity (not specified) | 3.14 |
| II.化學組成 Chemical Composition | | |
| 項目 Items | 澳門水泥標準要求 REQUIREMENTS | 典型數值 TYPICAL RESULTS |
| 燒失量 Loss on Ignition | ≤ 5.0 % | 2.0 % |
| 酸不溶物 Insoluble Residue | ≤ 5.0 % | 0.5 % |
| 氧化硅 Silica (SiO ₂) | | 21.0% |
| 氧化鋁 Alumina (Al ₂ O ₃) | | 5.5% |
| 氧化鐵 Ferric oxide (Fe ₂ O ₃) | | 3.0% |
| 氧化鈣 Calcium Oxide(CaO) | | 64.5% |
| 氧化鎂 Magnesia (MgO) | | 1.3% |
| 三氧化硫 Sulphuric Anhydride (SO ₃) | ≤ 4.0 % | 2.5% |
| 氯 Chloride (Cl) | ≤ 0.10 % | 0.01% |
| 酸溶鹼含量 Acid Soluble Alkali as Na ₂ O | | 0.45% |
| 石灰飽和系數 Lime Saturation Factor | | 0.94% |
| 游離氧化鈣 Free Lime (fCaO) | | 0.0% |
| 硅酸三鈣 Tricalcium Silicate (C ₃ S) | | 53.3% |
| 硅酸二鈣 Dicalcium Silicate (C ₂ S) | | 18.7% |
| 鋁酸二鈣 Tricalcium Aluminate (C ₃ A) | | 8.7% |

鐵鋁酸四鈣

Tetracalcium Alumino Ferrite (C4AF)

10.0%

III 備註 Remarks：本公司水泥產品質量符合一定的波動範圍

The cement test results comply with the range of undulation.